DEPARTMENT OF TRANSPORTATIONDIVISION OF ENGINEERING SERVICES OFFICE ENGINEER, MS 43 1727 30TH STREET P.O. BOX 168041 SACRAMENTO, CA 95816-8041 PHONE (916) 227-6230 FAX (916) 227-6214



** WARNING ** WARNING ** WARNING **
This document is intended for informational purposes only.

Users are cautioned that California Department of Transportation (Department) does not assume any liability or responsibility based on these electronic files or for any defective or incomplete copying, exerpting, scanning, faxing or downloading of the contract documents. As always, for the official paper versions of the bidders packages and non-bidder packages, including addenda write to the California Department of Transportation, Plans and Bid Documents, Room 0200, P.O. Box 942874, Sacramento, CA 94272-0001, telephone (916) 654-4490 or fax (916) 654-7028. Office hours are 7:30 a.m. to 4:15 p.m. When ordering bidder or non-bidder packages it is important that you include a telephone number and fax number, P.O. Box and street address so that you can receive addenda.

May 25, 2004

TTY (916) 227-8454

04-SC1-9-0.0/7.9 & 10.8/18.5 04-2R2904

Addendum No. 2

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in SANTA CLARA COUNTY IN AND NEAR SARATOGA AT VARIOUS LOCATIONS FROM 0.0 KM ROUTE 9/35 CROSSING TO 0.07 KM EAST OF ROUTE 9/17 SEPARATION.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on June 2, 2004.

This addendum is being issued to revise the Project Plans, the Notice to Contractors and Special Provisions, and the Proposal and Contract.

The entire set of Project Plan Sheets (Sheets 1-24) are replaced with new Project Plan Sheets (Sheets 1-12C). Half-sized copies of the replacement sheets are attached for substitution for the original Project Plan Sheets.

In the "Notice to Contractors and Special Provisions," the STANDARD PLANS LIST is revised as attached.

In the Special Provisions, Section 4, "BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES," in the fifth paragraph, "75 WORKING DAYS" is changed to "45 WORKING DAYS".

In the Special Provisions, Section 4, "BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES," the sixth paragraph is revised as follows:

"The Contractor shall pay to the State of California the sum of \$3400 per day, for each and every calendar day's delay in finishing the work in excess of the number of working days prescribed above."

In the Special Provisions, Section 10-1.13, "EXISTING HIGHWAY FACILITIES," the subsections "ADJUST FRAME AND COVER TO GRADE," "ADJUST METAL BEAM GUARD RAILING," and "EXISTING LOOP DETECTORS," are deleted.

Addendum No. 2 Page 2 May 25, 2004

04-SC1-9-0.0/7.9 & 10.8/18.5 04-2R2904

In the Special Provisions, Section 10-1.13, ,"EXISTING HIGHWAY FACILITIES," the subsections "SALVAGE METAL BEAM GUARD RAILING," and "REMOVE ASPHALT CONCRETE DIKE," are added as attached.

In the Special Provisions, Section 10-1.15, "ASPHALT CONCRETE," is revised as attached.

In the Special Provisions, Section 10-1.19, "SHOULDER BACKING," is added as attached.

In the Special Provisions, Section 10-1.20, "METAL BEAM GUARD RAILING," is added as attached.

In the Special Provisions, Section 10-3., "SIGNALS, LIGHTING AND ELECTRICAL SYSTEMS," is deleted.

In the Proposal and Contract, the Engineer's Estimate Items 7, 9, 11, 15, 17, 18, 19, 20, 22, 23, 24, 26, 27 and 29 are revised, Items 32, 33, 34, 35, 36, 37, 38, 39 and 40 are added and Items 8, 10, 12, 13, 14, 21, 25, 28, 30, and 31 are deleted as attached.

To Proposal and Contract book holders:

Replace the entire Engineer's Estimate in the Proposal with the attached revised Engineer's Estimate. The revised Engineer's Estimate is to be used in the bid.

Indicate receipt of this addendum by filling in the number of this addendum in the space provided on the signature page of the proposal.

Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

This office is sending this addendum by UPS overnight mail to all book holders to ensure that each receives it. A copy of this addendum and the modified wage rates are available for the contractor's use on the Internet Site:

http://www.dot.ca.gov/hq/esc/oe/weekly_ads/addendum_page.html

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY

REBECCA D. HARNAGEL, Chief Office of Plans, Specifications & Estimates Office Engineer

Attachments

STANDARD PLANS LIST

The Standard Plan sheets applicable to this contract include, but are not limited to those indicated below. The Revised Standard Plans (RSP) and New Standard Plans (NSP) which apply to this contract are included as individual sheets of the project plans.

| A10A | Abbreviations |
|----------|--|
| A10B | Symbols |
| A20A | Pavement Markers and Traffic Lines, Typical Details |
| A20B | Pavement Markers and Traffic Lines, Typical Details |
| A20C | Pavement Markers and Traffic Lines, Typical Details |
| A20D | Pavement Markers and Traffic Lines, Typical Details |
| A24A | Pavement Markings - Arrows |
| A24B | Pavement Markings - Arrows |
| A24D | Pavement Markings - Words |
| A24E | Pavement Markings - Words and Crosswalks |
| A73B | Markers |
| A77A | Metal Beam Guard Railing – Typical Wood Post With Wood Block |
| A77B | Metal Beam Guard Railing - Standard Hardware |
| A77C | Metal Beam Guard Railing - Wood Post and Wood Block Details |
| A77D | Metal Beam Guard Railing – Typical Layouts |
| A77E | Metal Beam Guard Railing – Typical Layouts |
| A77F | Metal Beam Guard Railing – Typical Embankment Widening for End Treatments |
| A77FA | Metal Beam Guard Railing – Typical Line Post Installation |
| A77J | Metal Beam Guard Railing Connections to Bridge Railings, Retaining Walls and Abutments |
| A77K | Metal Beam Guard Railing Connections to Bridge Sidewalks and Curbs |
| RSP A77L | Metal Beam Guard Railing and Single Faced Barrier Railing Terminal System - End Treatments |
| RSP A77M | Metal Beam Guard Railing and Single Faced Barrier Railing Terminal System - End Treatment |
| A87 | Curbs, Dikes and Driveways |
| T1A | Temporary Crash Cushion, Sand Filled (Unidirectional) |
| T1B | Temporary Crash Cushion, Sand Filled (Bidirectional) |
| RSP T2 | Temporary Crash Cushion, Sand Filled (Shoulder Installations) |
| T10 | Traffic Control System for Lane Closure On Freeways and Expressways |
| T14 | Traffic Control System for Ramp Closure |
| RS1 | Roadside Signs, Typical Installation Details No. 1 |
| RS2 | Roadside Signs - Wood Post, Typical Installation Details No. 2 |
| | |

SALVAGE METAL BEAM GUARD RAILING

Existing metal beam guard railing, where shown on the plans to be salvaged, shall be removed and salvaged.

Salvaged metal beam guard railing materials shall be hauled to Caltrans Maintenance Yard, Saratoga, California, and stockpiled.

Existing concrete anchors or steel foundation tubes shall be completely removed and disposed of. Full compensation for removing and disposing of concrete anchors or steel foundation tubes shall be considered as included in the contract price paid per meter for salvage metal beam guard railing and no separate payment will be made therefor.

Full compensation for removing cable anchor assemblies, terminal anchor assemblies or steel foundation tubes shall be considered as included in the contract price paid per meter for salvage metal beam guard railing and no separate payment will be made therefor.

REMOVE ASPHALT CONCRETE DIKE

Existing asphalt concrete dike, where shown on the plans to be removed, shall be removed.

Prior to removing the dike, the outside edge of the asphalt concrete to remain in place shall be cut on a neat line to a minimum depth of 50 mm.

The dike shall be removed in such a manner that the surfacing which is to remain in place is not damaged.

The dike shall be disposed of outside the highway right of way in conformance with the provisions in Section 7-1.13 of the Standard Specifications.

10-1.15 ASPHALT CONCRETE

Asphalt concrete shall be open graded and Type A and shall conform to the provisions in Section 39, "Asphalt Concrete," of the Standard Specifications and these special provisions.

Open graded asphalt concrete may be placed when the atmospheric temperature is below 20°C, but above 10°C, provided the following requirements are met:

- A. The aggregate grading shall be 12.5-mm maximum.
- B. Open graded asphalt concrete shall be not less than 30 mm in compacted thickness.
- C. Immediately prior to adding the asphalt binder to the open graded asphalt concrete mixture, the temperature of the aggregate shall be not more than 163°C. Open graded asphalt concrete shall be spread at a temperature of not less than 135°C measured in the hopper in the asphalt paver.
- D. The compaction operation shall be such that the maximum distance between the asphalt paver and the initial breakdown rolling shall be no greater than 15 m.
- E. The Contractor shall cover loads of open graded asphalt concrete with tarpaulins. The tarpaulins shall completely cover exposed open graded asphalt concrete in the hauling vehicle until the open graded asphalt concrete has been completely transferred into the asphalt paver hopper or placed in a windrow.

The grade of asphalt binder to be mixed with aggregate for open graded asphalt concrete shall be PBA Grade 6A and shall conform to the provisions in "Asphalt" of these special provisions.

The aggregate for Type A asphalt concrete for replace asphalt concrete surfacing shall conform to the 19-mm maximum, medium grading specified in Section 39-2.02, "Aggregate," of the Standard Specifications.

Aggregate for asphalt concrete dikes shall be in conformance with the provisions for 9.5-mm maximum grading in Section 39-2.02, "Aggregate," of the Standard Specifications.

The amount of asphalt binder used in asphalt concrete placed in dikes, gutters, gutter flares, overside drains and aprons at the ends of drainage structures shall be increased one percent by mass of the aggregate over the amount of asphalt binder determined for use in asphalt concrete placed on the traveled way.

The asphalt content of the asphalt mixture will be determined in conformance with the requirements in California Test 379, or in conformance with the requirements in California Test 382.

Paint binder (tack coat) shall be applied to existing surfaces to be surfaced and between layers of asphalt concrete, except when eliminated by the Engineer.

Paint binder (tack coat) shall be, at the option of the Contractor, either slow-setting asphaltic emulsion, rapid-setting asphaltic emulsion or paving asphalt. Slow-setting asphaltic emulsion and rapid-setting asphaltic emulsion shall conform to the provisions in Section 39-4.02, "Prime Coat and Paint Binder (Tack Coat)," and the provisions in Section 94, "Asphaltic Emulsions," of the Standard Specifications. When paving asphalt is used for paint binder, the grade will be determined by the Engineer. Paving asphalt shall conform to the provisions in Section 39-4.02, "Prime Coat and Paint Binder (Tack Coat)," and the provisions in Section 92, "Asphalts," of the Standard Specifications.

Paint binder (tack coat) shall be applied in the liter per square meter range limits specified for the surfaces to receive asphalt concrete in the tables below. The exact application rate within the range will be determined by the Engineer.

| Application Rates for Asphaltic Emulsion Paint Binder (Tack Coat) on Asphalt Concrete (except Open Graded) and on Portland Cement Concrete Pavement (PCCP) | | | | | |
|--|-------------|-------------|--|--|--|
| Type of surface to receive Slow-Setting Asphaltic Emulsion Rapid-Setting Asphaltic Emulsion paint binder (tack coat) L/m ² (Note A) L/m ² (Note B) | | | | | |
| Dense, compact surfaces, between layers, and on PCCP | 0.20 – 0.35 | 0.10 - 0.20 | | | |
| Open textured, or dry, aged surfaces | 0.35 – 0.90 | 0.20 - 0.40 | | | |

Note A: Slow-setting asphaltic emulsion is asphaltic emulsion diluted with additional water. Water shall be added and mixed with the asphaltic emulsion (containing up to 43 percent water) so the resulting mixture contains one part asphaltic emulsion and not more than one part added water. The water shall be added by the emulsion producer or at a facility that has the capability to mix or agitate the combined blend.

Note B: Undiluted rapid-setting asphaltic emulsion.

| Application Rates for Paint Binder (Tack Coat) on Asphalt Concrete (except Open Graded) and on Portland Cement Concrete Pavement (PCCP) | | | |
|---|------------------------------------|--|--|
| Type of surface to receive paint binder (tack coat) | Paving Asphalt L/m ² | | |
| Dense, compact surfaces, between layers, and on PCCP | 0.05 - 0.10 | | |
| Open textured, or dry, aged surfaces | 0.10 - 0.25 | | |

| Application Rates for Asphaltic Emulsion Paint Binder (Tack Coat) on Open Graded Asphalt Concrete | | | | | | |
|---|---------------------------------|----------------------------------|--|--|--|--|
| Type of surface to receive | Slow-Setting Asphaltic Emulsion | Rapid-setting Asphaltic Emulsion | | | | |
| paint binder (tack coat) | $L/m^2(Note A)$ | L/m ² (Note B) | | | | |
| Dense, compact surfaces | 0.25 - 0.50 | 0.10 - 0.25 | | | | |
| and between layers | | | | | | |
| Open textured, or dry, | 0.50 - 1.10 | 0.25 - 0.55 | | | | |
| aged surfaces | | | | | | |

Note A: Slow-setting asphaltic emulsion is asphaltic emulsion diluted with additional water. Water shall be added and mixed with the asphaltic emulsion (containing up to 43 percent water) so the resulting mixture contains one part asphaltic emulsion and not more than one part added water. The water shall be added by the emulsion producer or at a facility that has the capability to mix or agitate the combined blend.

Note B: Undiluted rapid-setting asphaltic emulsion.

| Application Rates for Paint Binder (Tack Coat) on | | | | |
|---|------------------|--|--|--|
| Open Graded Asphalt Concrete | | | | |
| Type of surface to receive paint binder (tack coat) | Paving Asphalt | | | |
| | L/m ² | | | |
| Dense, compact surfaces and between layers | 0.05 - 0.15 | | | |
| Open textured, or dry, aged surfaces | 0.15 - 0.30 | | | |

The area to which paint binder has been applied shall be closed to public traffic. Care shall be taken to avoid tracking binder material onto existing pavement surfaces beyond the limits of construction.

Shoulder or median borders adjacent to a lane being paved shall be surfaced prior to opening the lane to traffic.

The Contractor shall schedule paving operations so that each layer of asphalt concrete is placed on contiguous lanes of the traveled way during each work shift. At the end of each work shift, the distance between the ends of the layers of asphalt concrete on adjacent lanes shall not be greater than 3 m or less than 1.5 m. Additional asphalt concrete shall be placed along the transverse edge at the end of each lane and along the exposed longitudinal edges between adjacent lanes, hand raked, and compacted to form temporary conforms. Kraft paper, or other approved bond breaker, may be placed under the conform tapers to facilitate the removal of the taper when paving operations resume.

Half-width surfacing operations shall be performed in a manner that, at the end of each day's work, the distance between the ends of adjacent surfaced lanes shall not be greater than can be completed in the following day of normal surfacing operations.

Shoulders or median borders adjacent to a lane being paved shall be surfaced prior to opening the lane to public traffic. Shoulder conform tapers, as shown on the plans, shall be placed concurrently with the surfacing of the adjacent lane.

Asphalt concrete surfacing shall be placed on existing surfacing, including curve widening, chain control lanes, turnouts, left turn lanes, and public and private road connections shown on the plans, unless otherwise directed by the Engineer.

Additional asphalt concrete surfacing material shall be placed along the edge of the surfacing at road connections and private drives, hand raked, if necessary, and compacted to form smooth tapered conforms. Full compensation for furnishing all labor and tools and for doing all the work necessary to hand rake these conforms shall be considered as included in the contract prices paid per tonne for the various items of asphalt concrete surfacing involved and no additional compensation will be allowed therefor.

10-1.19 SHOULDER BACKING

This work shall consist of constructing shoulder backing adjacent to the edge of new pavement surfacing in conformance with the details shown on the plans and these special provisions.

Material for shoulder backing shall be imported material or material processed from reclaimed portland cement concrete, lean concrete base, cement treated base, or a combination of any of these materials, conforming to the following grading and quality requirements:

| Grading Requirements | | Quality Requirements | | | |
|----------------------|--------------------|-------------------------------|-----|-----------------------|--|
| Sieve Sizes | Percentage Passing | Specification California Test | | Requirement | |
| 50 mm | 100 | Sand Equivalent | 217 | 10 minimum-30 maximum | |
| 25 mm | 75 - 100 | Resistance (R-value) | 301 | 50 minimum | |
| 4.75 mm | 40 - 60 | Percentage Crushed Particles | 205 | 75% minimum | |
| 600 µm | 12 - 35 | Durability Index | 229 | 20 minimum | |
| 75 µm | 5 - 20 | | | | |

At the option of the Contractor, aggregate for shoulder backing may consist of material processed from reclaimed asphalt concrete conforming to the following grading and quality requirements:

| Grading Requirements | | Quality Requirements | | | |
|----------------------------------|----------|--------------------------------------|-----|-------------|--|
| Sieve Sizes Percentage Passing | | assing Specification California Test | | Requirement | |
| 50 mm | 100 | Resistance (R-value) | 301 | 50 minimum | |
| 19 mm | 70 - 100 | Percentage Crushed Particles | 205 | 75% minimum | |
| 4.75 mm | 30 - 80 | Durability Index | 229 | 20 minimum | |

Coarse aggregate consisting of material retained on the 4.75-mm sieve, shall consist of material of which at least 75 percent by mass shall be crushed particles with a minimum of two fractured faces, as determined in conformance with California Test 205.

Shoulder backing material shall have a minimum unit weight of 2160 kg/m³ as determined in conformance with California Test 212.

Shoulder backing material shall not be treated with lime, cement or other chemical mixtures.

Shoulder backing material consisting of reclaimed asphalt concrete, shall not be placed within 30 m measured horizontally of any culvert, watercourse, or bridge within the project limits.

The areas where shoulder backing is to be constructed shall be cleared of weeds, grass, and debris. Removed weeds grass and debris shall be disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

Prior to placement of shoulder backing material, basement material shall be scarified to a minimum depth of 75 mm. Immediately prior to placement of shoulder backing material, scarified material shall be watered. Shoulder backing material shall be placed, watered, and rolled a minimum of two passes with a steel tired roller weighing not less than 7.2 tonne to form a smooth, compacted surface. Watering shall conform to the provisions in Section 17, "Watering," of the Standard Specifications.

Shoulder backing material shall not be deposited on new pavement surfacing prior to placing the material in the final position, nor shall the material be deposited onto new pavement surfacing during mixing, watering, and blading operations.

Shoulder backing construction shall be completed along the edges of any portion of new pavement surfacing within 5 days after completion of that portion of the new surfacing. Prior to opening a lane adjacent to uncompleted shoulder backing to uncontrolled public traffic, the Contractor shall furnish, place, and maintain portable delineators and C31 (Low Shoulder) signs off of and adjacent to the new pavement surfacing. Portable delineators shall be placed at the beginning and along the drop-off of the edge of pavement, in the direction of travel, at successive maximum intervals of 150 m on tangents and 60 m on curves. C31 signs shall be placed at the beginning and along the drop-off at successive maximum intervals of 600 m. The portable delineators and C31 signs shall be maintained in place at each location until the shoulder backing is completed at that location. Portable delineators and signs shall conform to the provisions in Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications, except the signs may be set on temporary portable supports or on barricades.

Quantities of imported material (shoulder backing) will be measured by the tonne in conformance with the provisions in Section 9-1.01, "Measurement of Quantities," of the Standard Specifications, except that the mass of water in the aggregate will not be determined and no deduction will be made from the mass of material delivered to the work.

The contract price paid per tonne for imported material (shoulder backing) shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing shoulder backing, complete in place, including furnishing, placing, maintaining, and removing portable delineators, C31 signs, and temporary supports or barricades for the signs, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

10-1.20 METAL BEAM GUARD RAILING

Metal beam guard railing shall be constructed in conformance with the provisions in Section 83-1, "Railings," of the Standard Specifications and these special provisions.

Attention is directed to "Order of Work" of these special provisions.

Line posts and blocks shall be wood.

Metal beam guard railing elements and required backup plates, terminal sections, end sections, and return sections shall conform to the requirements of Type 2 W-Beam as shown in AASHTO Designation: M 180.

TERMINAL SYSTEM (TYPE SRT)

Terminal system (Type SRT) shall be furnished and installed as shown on the plans and in conformance with these special provisions.

Terminal system (Type SRT) shall be a SRT-350 Slotted Rail Terminal (8 post system) as manufactured by Trinity Industries, Inc., and shall include all the items detailed for terminal system (Type SRT) shown on the plans.

The 5 mm x 44 mm x 75 mm plate washer shown on the elevation view and in Section D-D at Wood Post No. 1 shall be omitted.

The Contractor shall provide the Engineer with a Certificate of Compliance from the manufacturer in conformance with the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications. The Certificate of Compliance shall certify that terminal systems (Type SRT) conform to the contract plans and specifications, conform to the prequalified design and material requirements and were manufactured in conformance with the approved quality control program.

The terminal system (Type SRT) shall be installed in conformance with the manufacturer's installation instructions and these requirements. The steel foundation tubes with soil plates attached, shall be, at the Contractor's option, either driven, with or without pilot holes, or placed in drilled holes. Space around the steel foundation tubes shall be backfilled with selected earth, free of rock, placed in layers approximately 100 mm thick and each layer shall be moistened and thoroughly compacted. Wood terminal posts shall be inserted into the steel foundation tubes by hand. Before the wood terminal posts are inserted, the inside surfaces of the steel foundation tubes to receive the wood posts shall be coated with a grease which will not melt or run at a temperature of 65°C or less. The edges of the wood terminal posts may be slightly rounded to facilitate insertion of the post into the steel foundation tubes.

Surplus excavated material remaining after the terminal system (Type SRT) has been constructed shall be disposed of in a uniform manner along the adjacent roadway where designated by the Engineer.

ENGINEER'S ESTIMATE 04-2R2904

| Item | Item Code | Item | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|----------|--------------|---|--------------------|--------------------|------------|------------|
| 1 | 070012 | PROGRESS SCHEDULE (CRITICAL PATH METHOD) | LS | LUMP SUM | LUMP SUM | |
| 2 | 074017 | PREPARE WATER POLLUTION CONTROL PROGRAM | LS | LUMP SUM | LUMP SUM | |
| 3 | 074019 | PREPARE STORM WATER POLLUTION PREVENTION PLAN | LS | LUMP SUM | LUMP SUM | |
| 4 | 074020 | WATER POLLUTION CONTROL | LS | LUMP SUM | LUMP SUM | |
| 5 (S) | 120090 | CONSTRUCTION AREA SIGNS | LS | LUMP SUM | LUMP SUM | |
| 6 (S) | 120100 | TRAFFIC CONTROL SYSTEM | LS | LUMP SUM | LUMP SUM | |
| 7 | 150704 | REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE | M | 15 120 | | |
| 8 | BLANK | | | | | |
| 9 | 150714 | REMOVE THERMOPLASTIC TRAFFIC STRIPE | M | 17 910 | | |
| 10 | BLANK | | | | | |
| 11 | 150722 | REMOVE PAVEMENT MARKER | EA | 4160 | | |
| 12 | BLANK | | | | | |
| 13 | BLANK | | | | | |
| 14 | BLANK | | | | | |
| 15 | 153152 | COLD PLANE ASPHALT CONCRETE PAVEMENT (30 MM MAXIMUM) | M2 | 2300 | | |
| 16 | 190110 | LEAD COMPLIANCE PLAN | LS | LUMP SUM | LUMP SUM | |
| 17 | 374206 | SEAL RANDOM CRACKS | LNKM | 15 | | |
| 18 | 390095 | REPLACE ASPHALT CONCRETE SURFACING | M3 | 356 | | |
| 19 | 390165 | ASPHALT CONCRETE (OPEN GRADED) | TONN | 5800 | | |
| 20 | 397001 | ASPHALTIC EMULSION (PAINT BINDER) | TONN | 31 | | |

ENGINEER'S ESTIMATE 04-2R2904

| Item | Item Code | Item | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|-----------|--------------|---|--------------------|--------------------|------------|------------|
| 21 | BLANK | | | | | |
| 22 (S) | 840561 | 100 MM THERMOPLASTIC TRAFFIC STRIPE | M | 32 440 | | |
| 23 (S) | 840563 | 200 MM THERMOPLASTIC TRAFFIC STRIPE | M | 260 | | |
| 24 (S) | 840565 | 100 MM THERMOPLASTIC TRAFFIC STRIPE (DASHED YELLOW) | M | 40 | | |
| 25 | BLANK | | | | | |
| 26 (S) | 840571 | 100 MM THERMOPLASTIC TRAFFIC STRIPE (BROKEN 5.18 M - 2.14 M) | M | 180 | | |
| 27 (S) | 850103 | PAVEMENT MARKER (REFLECTIVE-SPECIAL TYPE G) | EA | 50 | | |
| 28 | BLANK | | | | | |
| 29 (S) | 850111 | PAVEMENT MARKER (RETROREFLECTIVE) | EA | 4110 | | |
| 30 | BLANK | | | | | |
| 31 | BLANK | | | | | |
| 32 | 150771 | REMOVE ASPHALT CONCRETE DIKE | M | 150 | | |
| 33 | 151272 | SLAVAGE METAL BEAM GUARD RAILING | M | 1030 | | |
| 34 | 198007 | IMPORTED MATERIAL (SHOULDER BACKING) | TONN | 260 | | |
| 35 | 394002 | PLACE ASPHALT CONCRETE (MISCELLANEOUS AREA) | M2 | 1400 | | |
| 36 | 394040 | PLACE ASPHALT CONCRETE DIKE (TYPE A) | M | 150 | | |
| 37 (S) | 832003 | METAL BEAM GUARD RAILING (WOOD POST) | M | 900 | | |
| 38 (S) | 839553 | END SECTION | EA | 2 | | |
| 39 (S) | 839565 | TERMINAL SYSTEM (TYPE SRT) | EA | 11 | | |
| 40 | 999990 | MOBILIZATION | LS | LUMP SUM | LUMP SUM | |